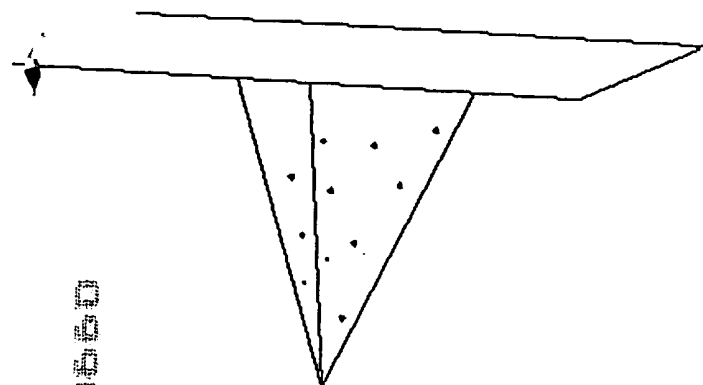


electrophoretically
deposit catalyst



CVD growth

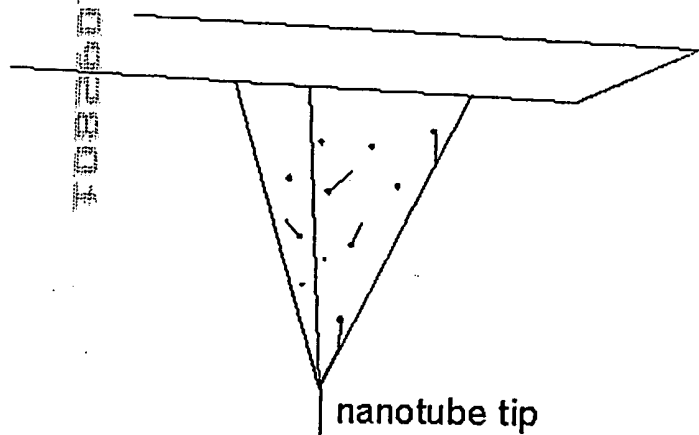


Figure 1

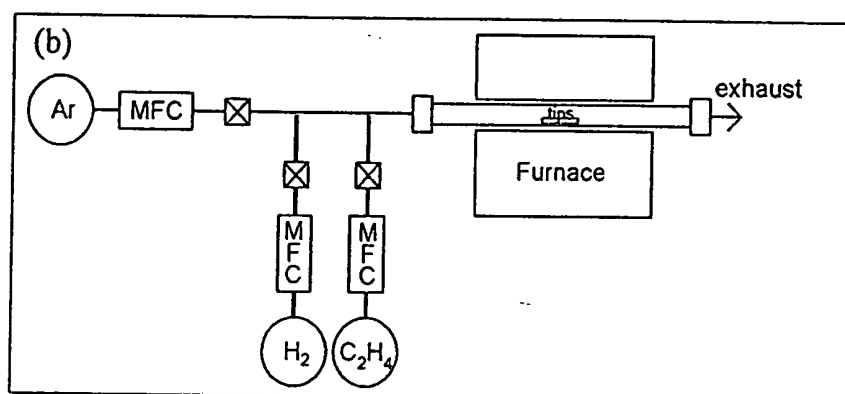
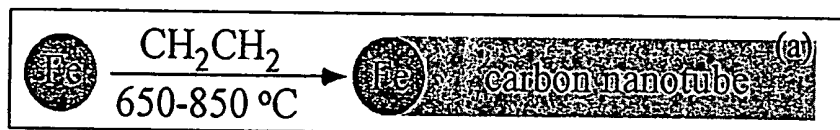


FIG. 2a, b

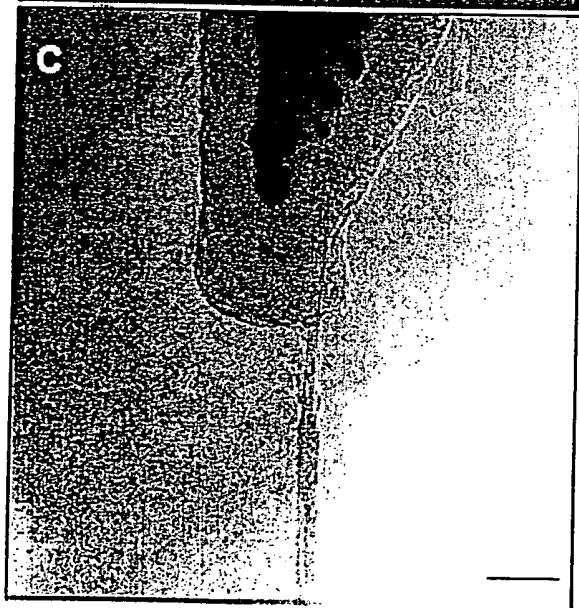
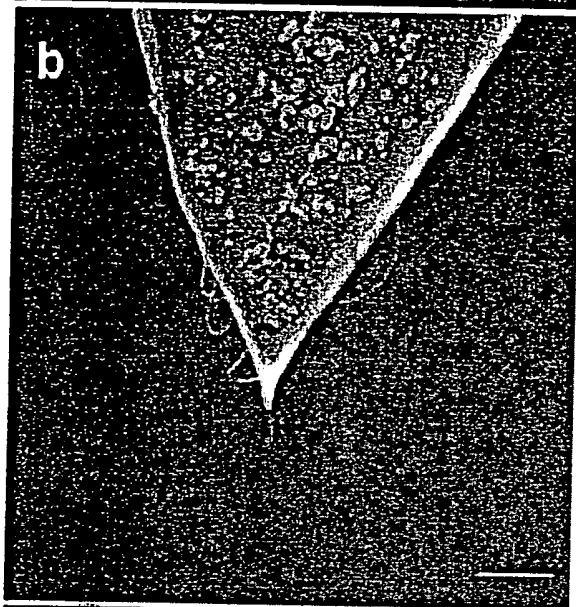
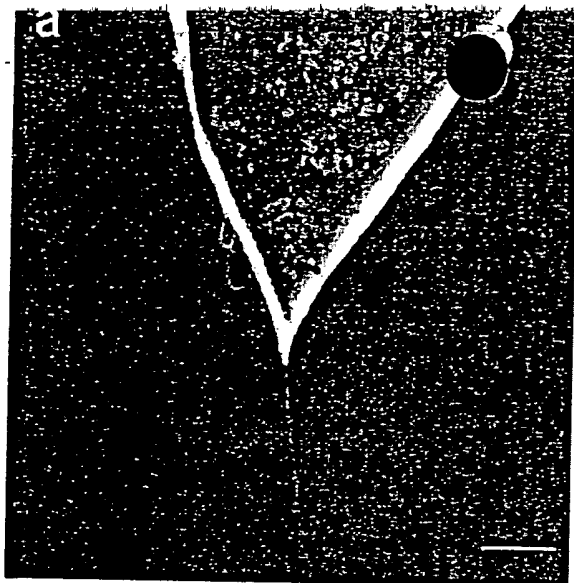
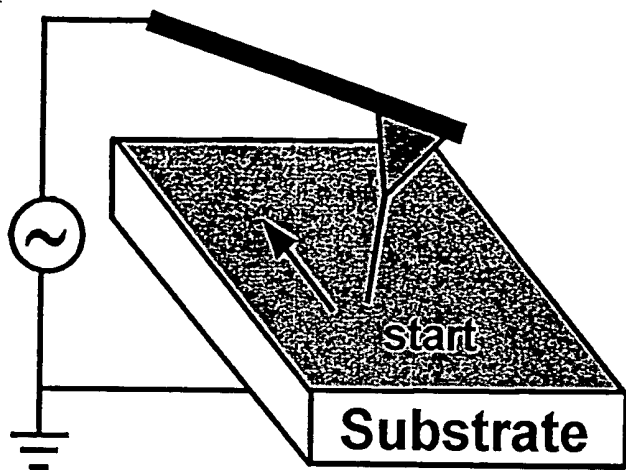
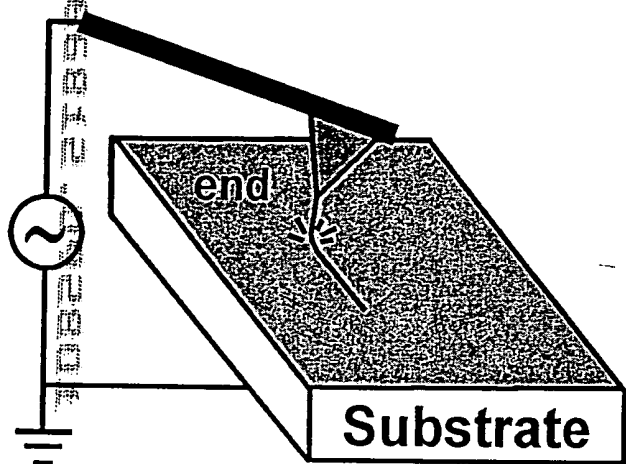


Figure 3

(a)



(b)



(c)

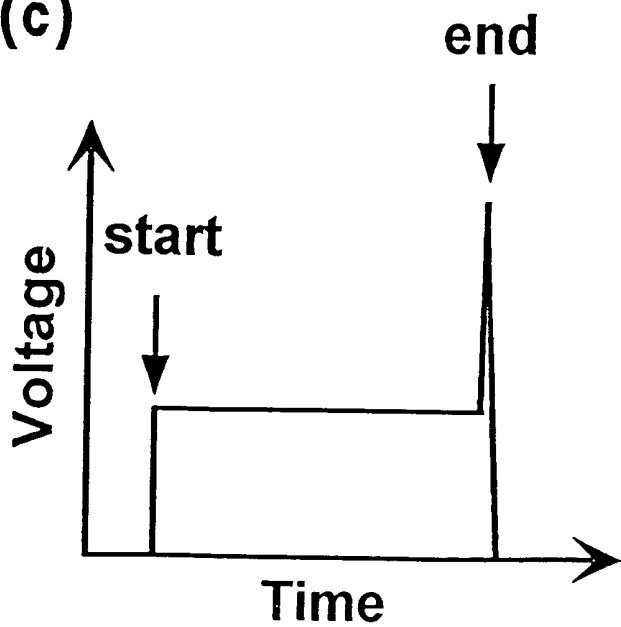


Figure 4

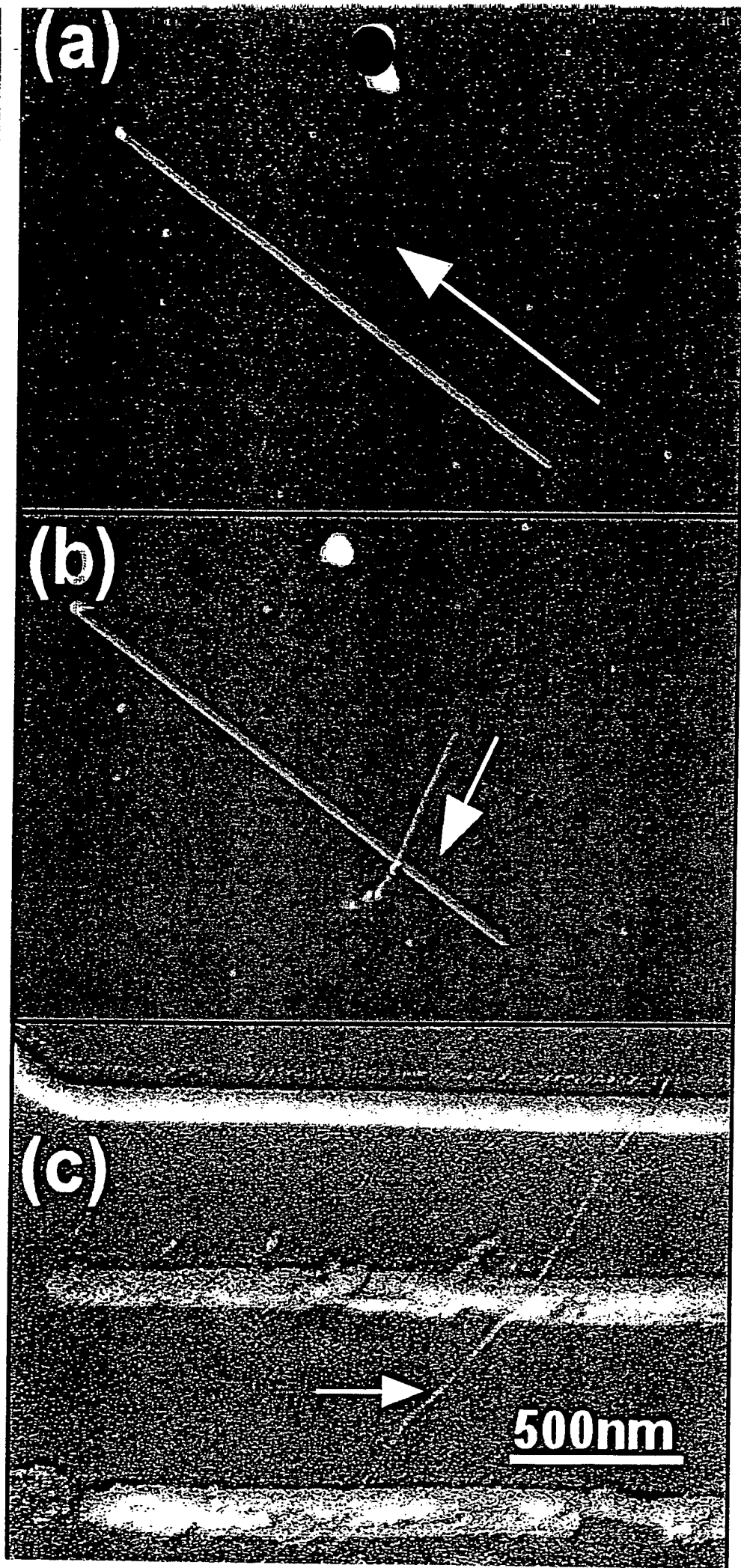


Figure 5

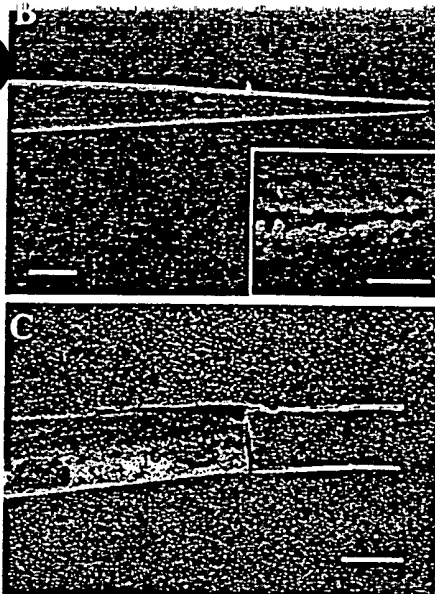
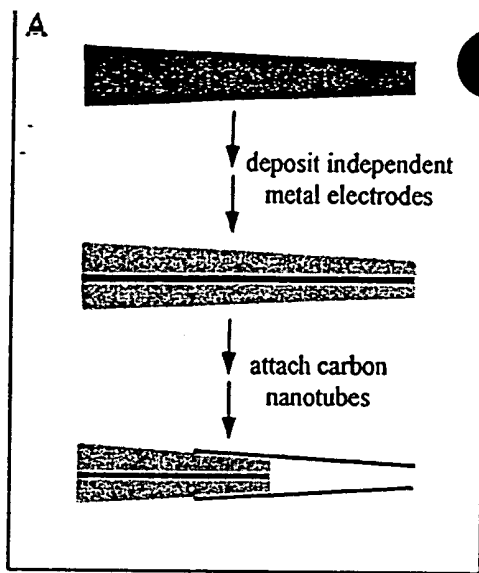


Figure 6

09565812.092804

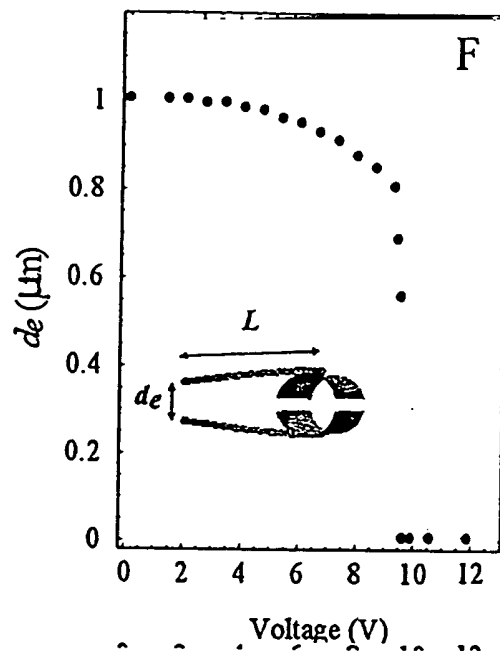
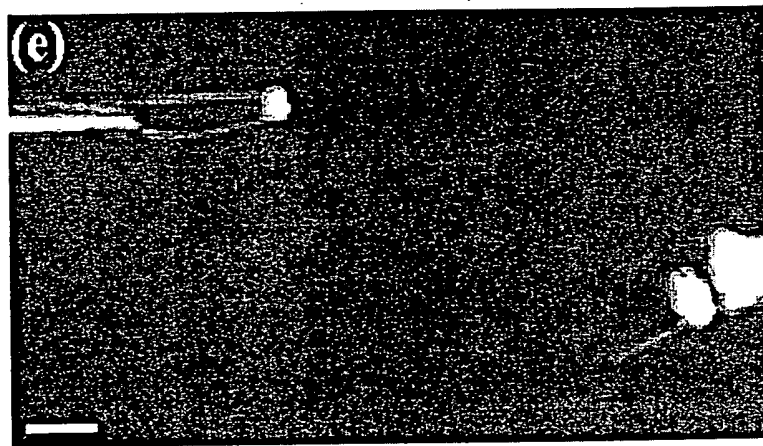
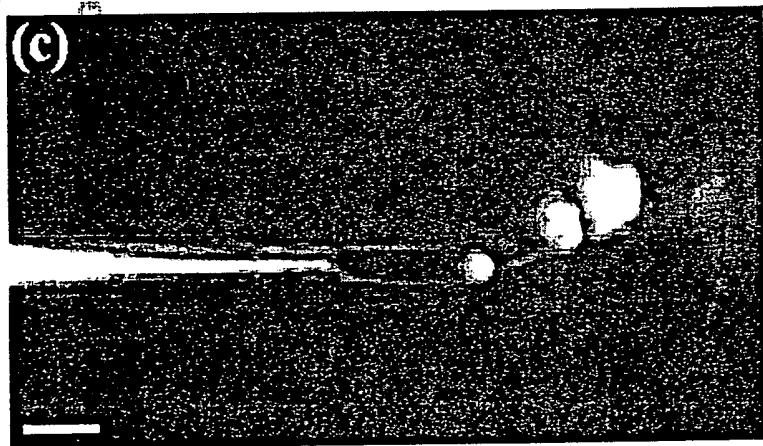
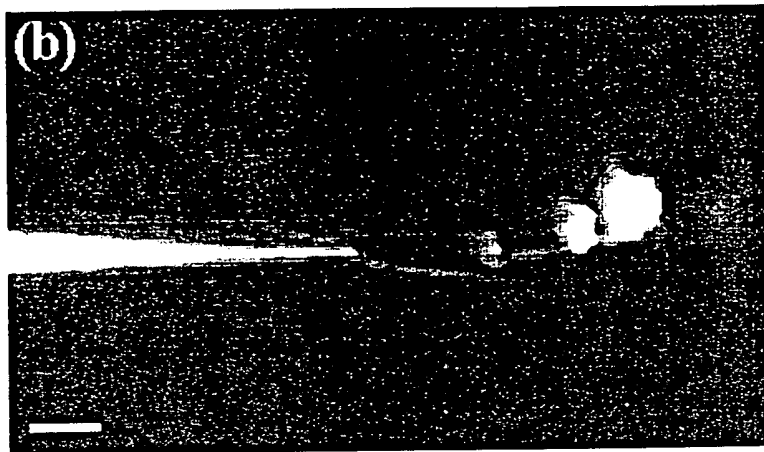
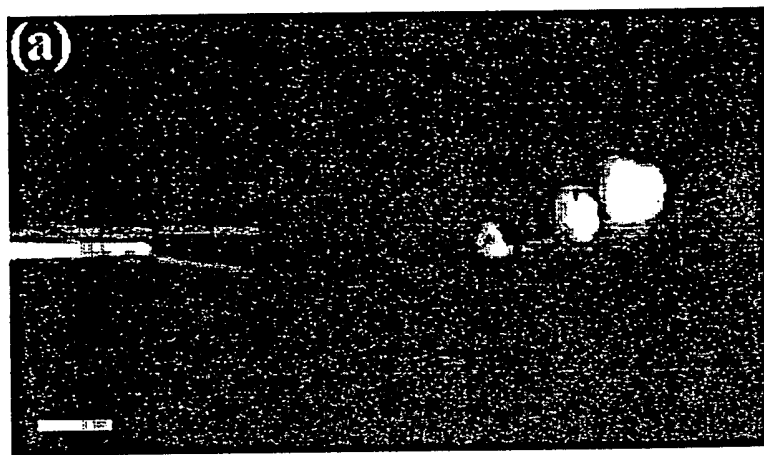


Figure 7

Figure 8



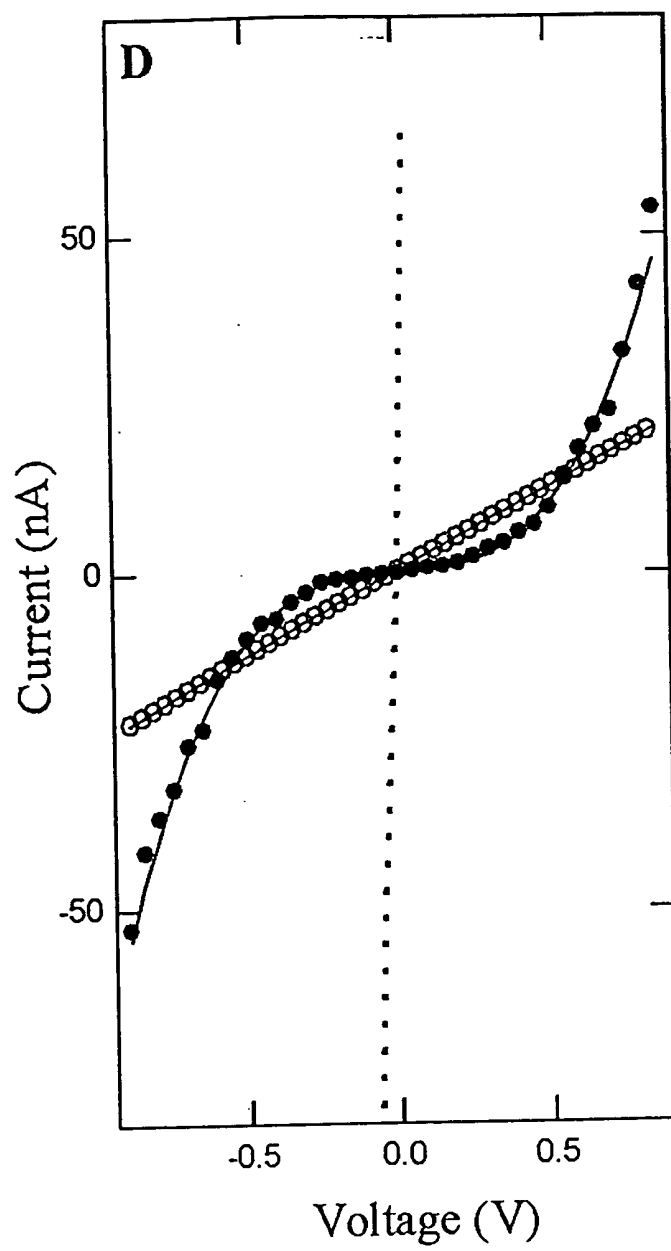
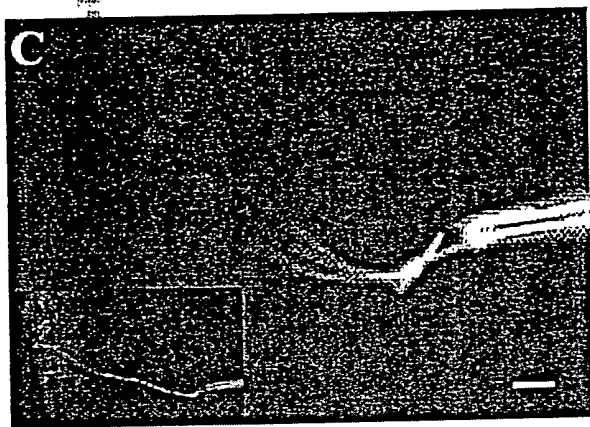
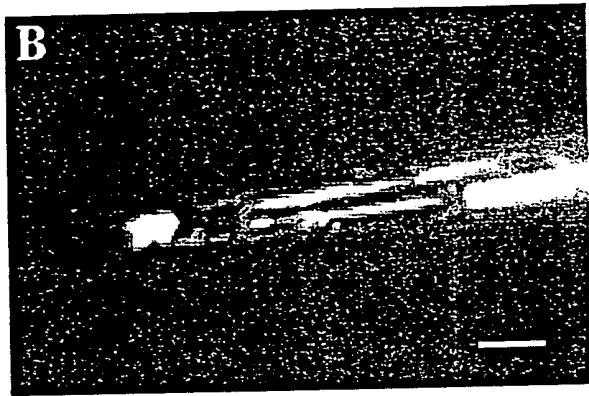
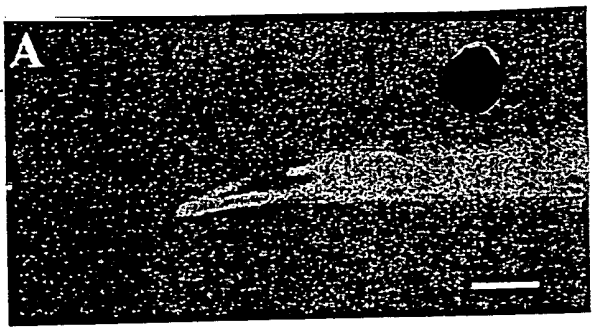
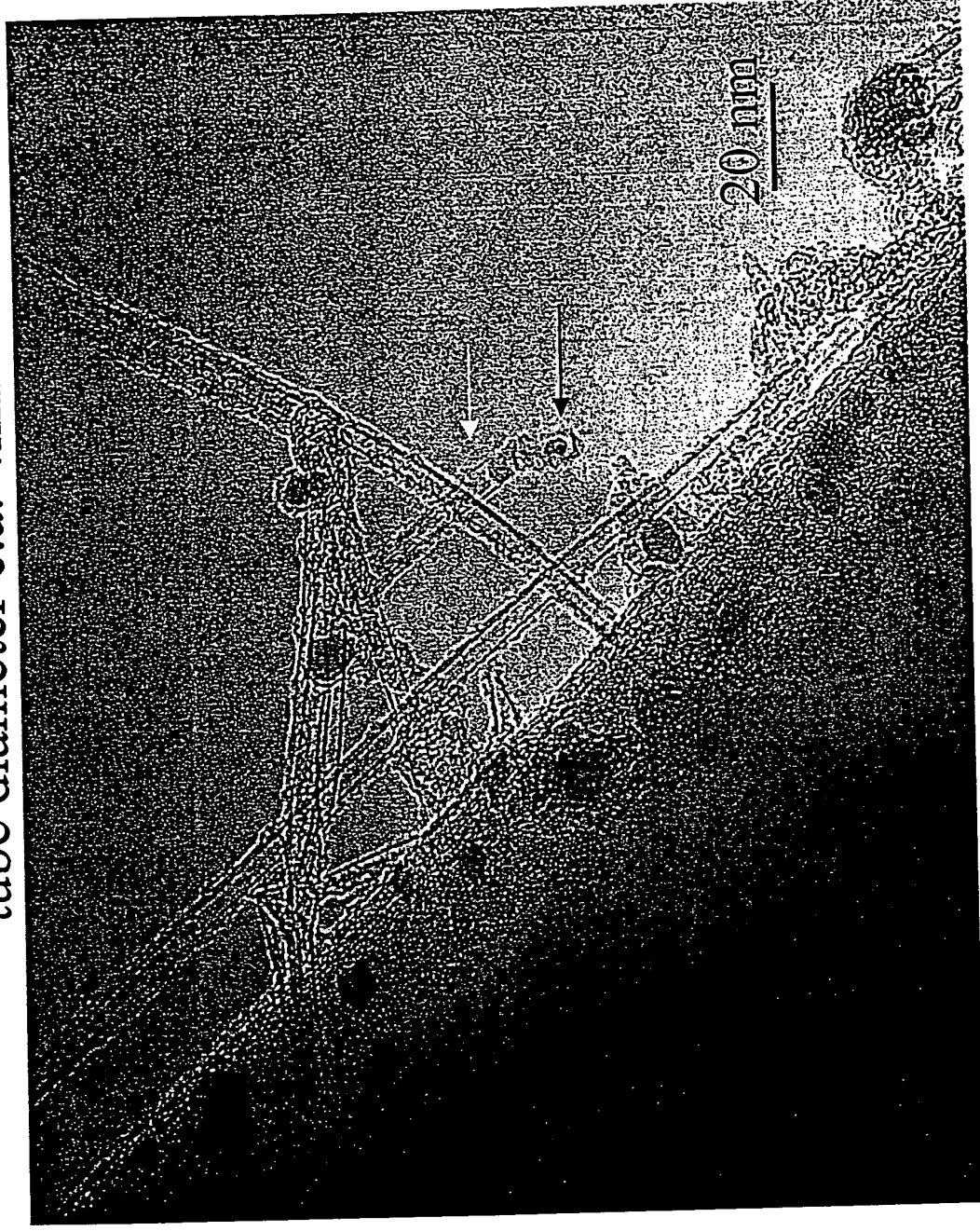


Figure 9

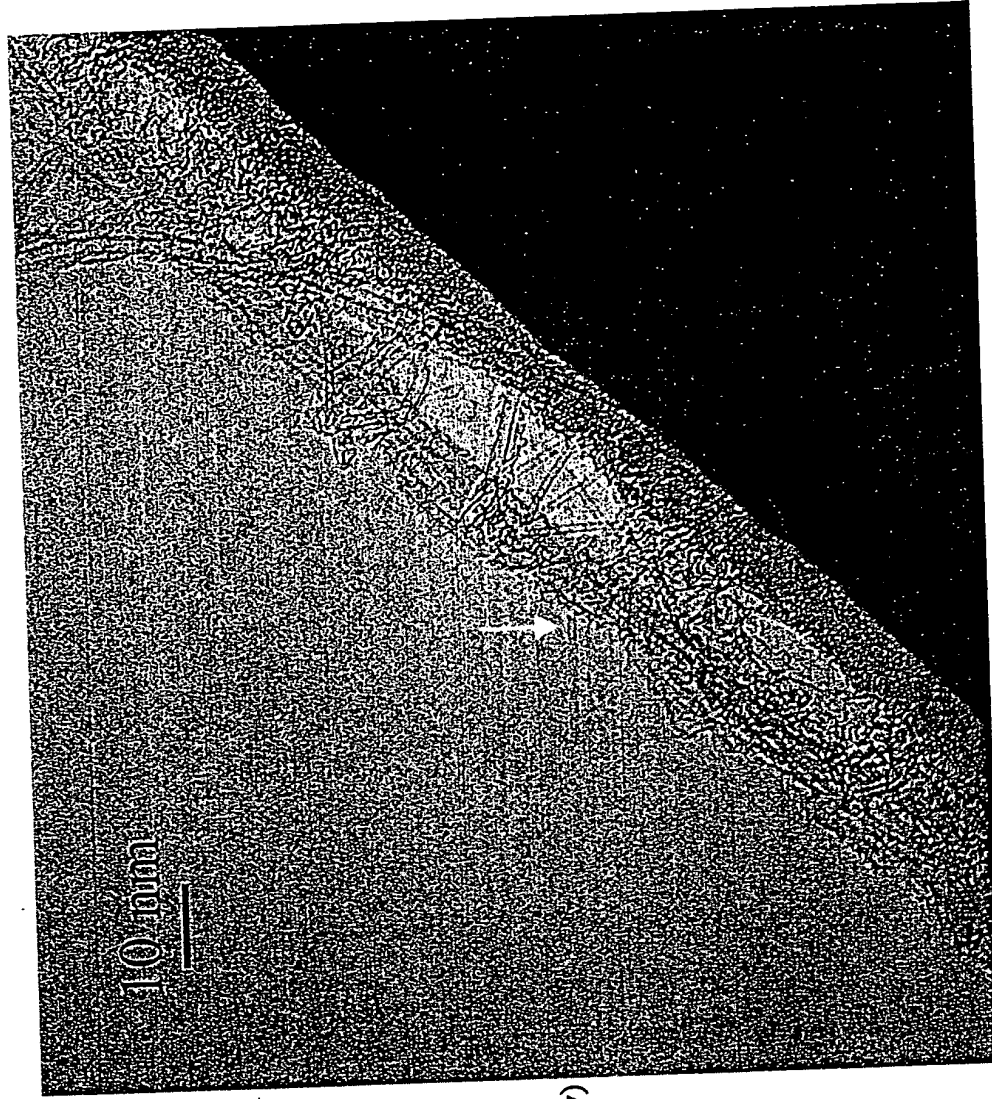
TEM picture of C_2H_4 CVD large tube synthesis
tube diameter c.a. 4nm



Catalyst: FeOx 6L (black arrow) Majority of catalyst size: 4 - 6 nm
Carbon Source: C_2H_4 , SWNT (white arrow) Majority of SWNT size: 4 nm

Fig. 10

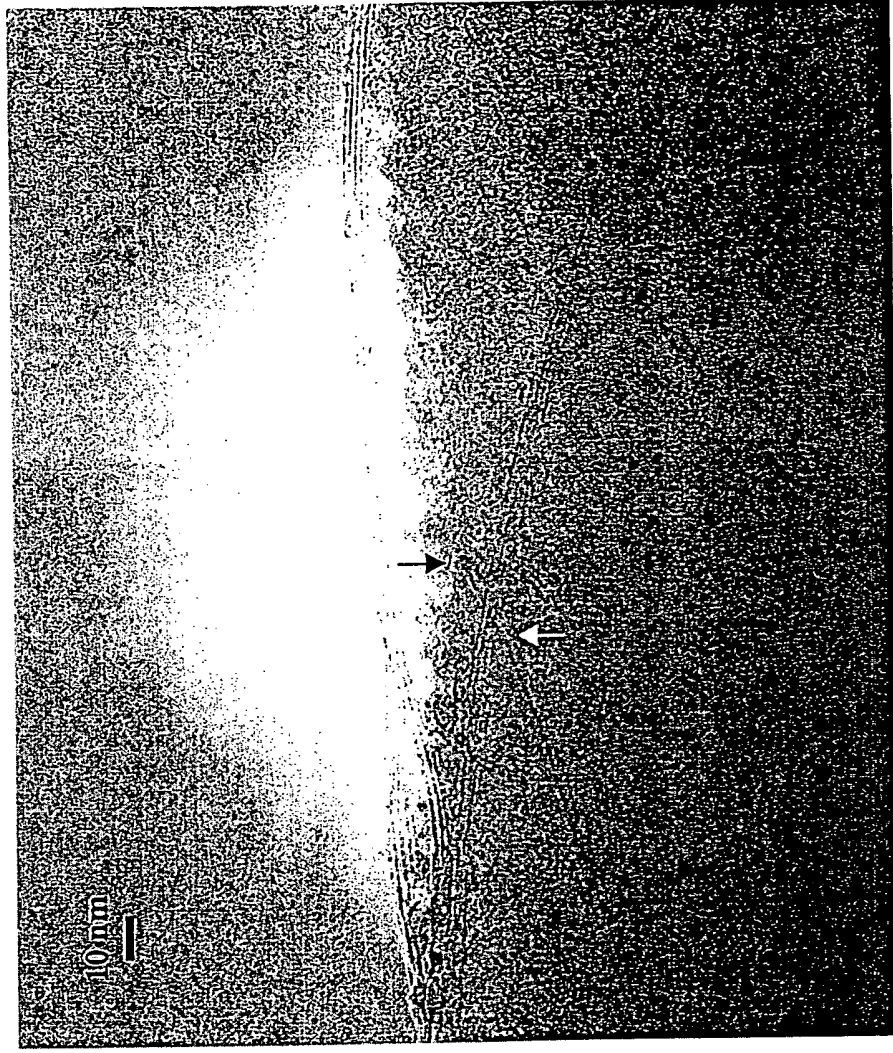
108260 21895660



Catalyst: FeOx 2L
Carbon source: CO
0.8 nm SWNT (white arrow)

Fig. 11

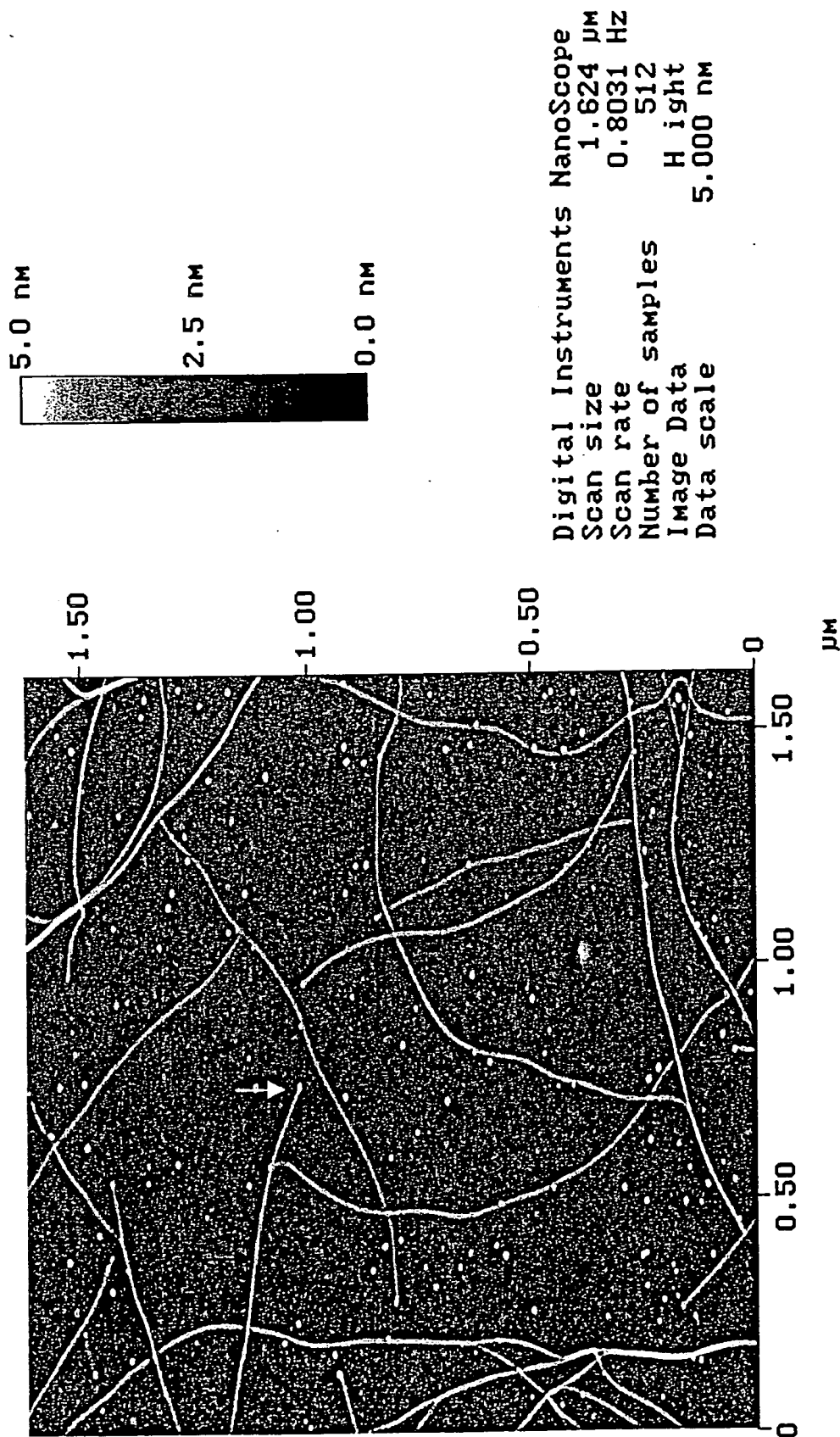
108250~21899660



Catalyst: FeOx 2L (black arrow)
Carbon source: CO, SWNT (white arrow)
Majority of catalyst size: 1.5 – 3.5 nm
Majority of nanotube size: 1.3 – 2.3 nm

Fig. 12

108260 21899660



Catalyst: FeOx 6L (white arrow)
Carbon source: C_2H_4 , SWNT (black arrow)

Fig. 13

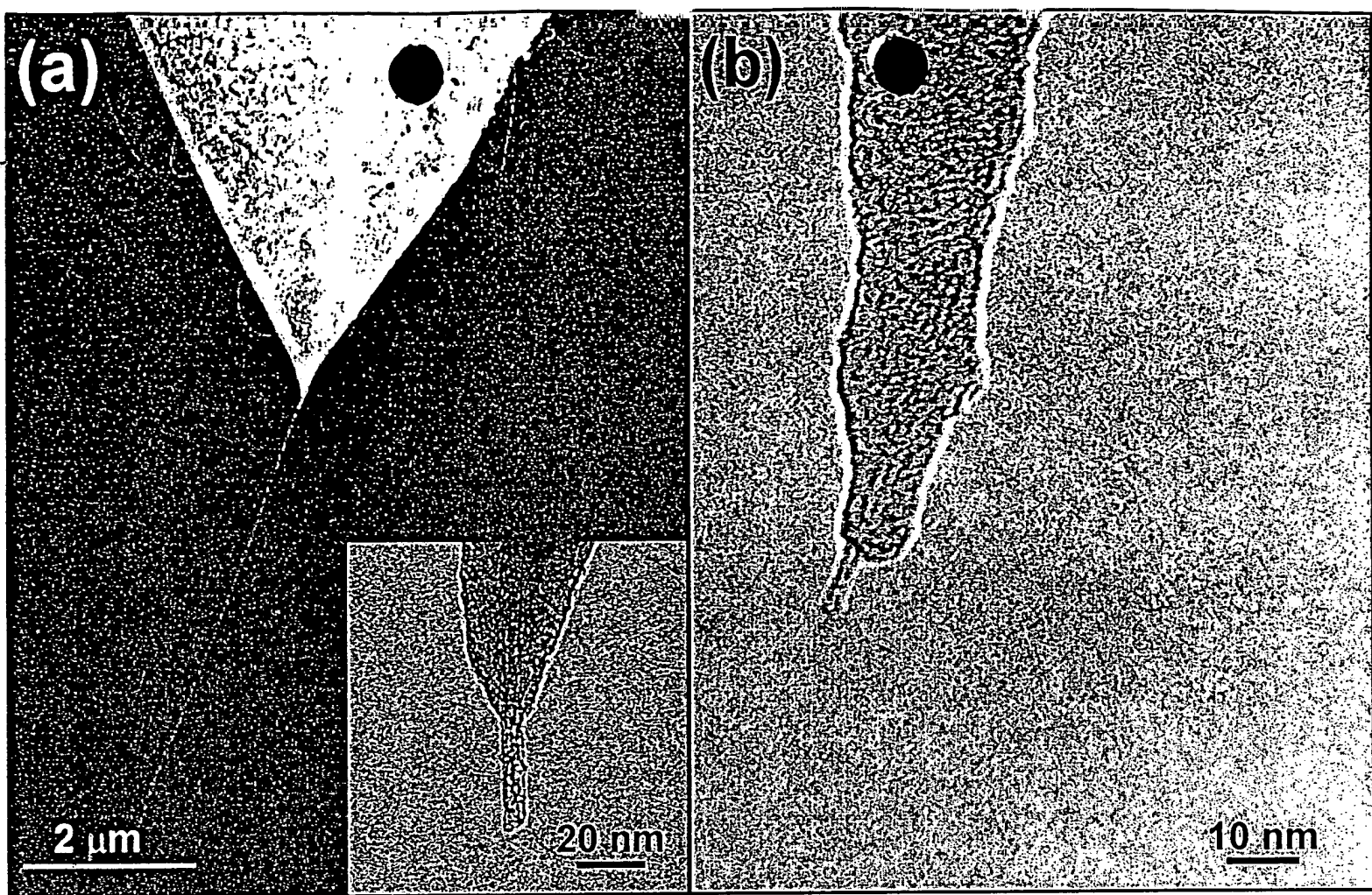


Figure 15